AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A polyamic acid having repeating units represented by the formula (1):

wherein the norbornane skeleton of

$$-H_2C$$
 CH_2

comprises four components of

$$-H_{2}C$$
 H
 CH_{2}
 $-H_{2}C$
 H
 CH_{2}
 H
 CH_{2

and their contents satisfy the following:

 $1 \% \le 2,5-[diexo] \le 90 \%$

 $1 \% \le 2,5-[exo,endo] \le 90 \%$,

 $1 \% \le 2,6-[diexo] \le 90 \%$

 $1 \% \le 2,6-[\text{exo,endo}] \le 90 \%$

provided that

(2,5-[diexo]) + (2,5-[exo,endo]) + (2,6-[diexo]) + (2,6-[exo,endo]) = 100 %, R represents a tetravalent group having from 4 to 27 carbon atoms and selected from the group consisting of an aliphatic group, a monocyclic aliphatic group, a condensed polycyclic aliphatic group, a monocyclic aromatic group, a condensed polycyclic aromatic group, and a non-condensed polycyclic aliphatic or aromatic group which is composed of cycloaliphatic or aromatic groups mutually bonded to each other either directly or via a crosslinking member, wherein the polyamic acid has an inherent viscosity measured in a solvent of N-methyl-2-pyrrolidone having an acid concentration of 0.5 g/dl at 35°C that falls between 0.1 and 3.0 dl/g.

2. (Original) A polyamic acid having repeating units represented by the formula(1):

wherein the norbornane skeleton of

$$-H_2C$$
 CH_2

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comprises four components of

and their contents satisfy the following:

 $10 \% \le 2,5-[diexo] \le 40 \%$

 $10 \% \le 2,5-[exo,endo] \le 40 \%$,

 $10 \% \le 2,6-[diexo] \le 40 \%$

 $10 \% \le 2,6-[exo,endo] \le 40 \%$

provided that

(2,5-[diexo]) + (2,5-[exo,endo]) + (2,6-[diexo]) + (2,6-[exo,endo]) = 100 %,

R represents a tetravalent group having from 4 to 27 carbon atoms and selected from the group consisting of an aliphatic group, a monocyclic aliphatic group, a condensed polycyclic aliphatic group, a monocyclic aromatic group, a condensed polycyclic aromatic group, and a non-condensed polycyclic aliphatic or aromatic group which is composed of cycloaliphatic or aromatic groups mutually bonded to each other either directly or via a crosslinking member.

3. (Original) A polyamic acid having repeating units represented by the formula (1):

wherein the norbornane skeleton of

$$-H_2C$$
 CH_2

comprises four components of

and their contents satisfy the following:

$$20 \% \le 2,5-[diexo] \le 30 \%$$

$$20 \% \le 2,5-[exo,endo] \le 30 \%$$
,

$$20 \% \le 2,6-[diexo] \le 30 \%$$

$$20 \% \le 2,6-[\text{exo,endo}] \le 30 \%$$

provided that

$$(2,5-[diexo]) + (2,5-[exo,endo]) + (2,6-[diexo]) + (2,6-[exo,endo]) = 100 \%,$$

R represents a tetravalent group having from 4 to 27 carbon atoms, and selected from the group consisting of an aliphatic group, a monocyclic aliphatic group, a condensed

polycyclic aliphatic group, a monocyclic aromatic group, a condensed polycyclic aromatic group, and a non-condensed polycyclic aliphatic or aromatic group which is composed of cycloaliphatic or aromatic groups mutually bonded to each other either directly or via a crosslinking member.

4. (Currently Amended) A polyimide having repeating units represented by the formula (2):

wherein the norbornane skeleton of

$$-H_2C$$
 CH_2

comprises four components of

$$-H_2C$$
 H
 CH_2
 $-CH_2$
 H
 $-CH_2$
 H
 CH_2
 H
 $-CH_2$
 H
 CH_2
 CH_2
 H
 CH_2
 CH_2
 H
 CH_2
 CH_2
 H
 CH_2
 CH_2

and their contents satisfy the following:

$$1 \% \le 2,5$$
-[diexo] $\le 90 \%$,

$$1 \% \le 2,5-[exo,endo] \le 90 \%$$
,

- $1 \% \le 2,6-[diexo] \le 90 \%$
- $1 \% \le 2,6-[exo,endo] \le 90 \%$

provided that

(2,5-[diexo]) + (2,5-[exo,endo]) + (2,6-[diexo]) + (2,6-[exo,endo]) = 100 %, R represents a tetravalent group having from 4 to 27 carbon atoms and selected from the group consisting of an aliphatic group, a monocyclic aliphatic group, a condensed polycyclic aliphatic group, a monocyclic aromatic group, a condensed polycyclic aromatic group, and a non-condensed polycyclic aliphatic or aromatic group which is composed of cycloaliphatic or aromatic groups mutually bonded to each other either directly or via a crosslinking member, wherein the polyimide has an inherent viscosity measured in a mixed solvent of p-chlorophenyl/phenol = 9/1 (by weight) with a polyimide concentration of 0.5 g/dl at 35°C that falls between 0.1 and 3.0 dl/g.

5. (Original) A polyimide having repeating units represented by the formula (2):

wherein the norbornane skeleton of

$$-H_2C$$
 CH_2

comprises four components of

$$-H_2C$$
 H
 CH_2
 H
 $-CH_2$
 H
 CH_2
 H
 CH_2
 H
 CH_2
 H
 CH_2
 CH_2
 H
 CH_2
 CH_2
 CH_2
 H
 CH_2
 C

and their contents satisfy the following:

$$10 \% \le 2,5\text{-[diexo]} \le 40 \%$$

$$10 \% \le 2,5-[exo,endo] \le 40 \%$$

$$10 \% \le 2,6-[diexo] \le 40 \%$$

$$10 \% \le 2,6-[exo,endo] \le 40 \%,$$

provided that

$$(2,5-[diexo]) + (2,5-[exo,endo]) + (2,6-[diexo]) +$$

$$(2,6-[exo,endo]) = 100 \%,$$

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R represents a tetravalent group having from 4 to 27 carbon atoms and selected from the group consisting of an aliphatic group, a monocyclic aliphatic group, a condensed polycyclic aliphatic group, a monocyclic aromatic group, a condensed polycyclic aromatic group, and a non-condensed polycyclic aliphatic or aromatic group which is composed of cycloaliphatic or aromatic groups mutually bonded to each other either directly or via a crosslinking member.

6. (Original) A polyimide having repeating units represented by the formula (2):

wherein the norbornane skeleton of

$$-H_2C$$
 CH_2

comprises four components of

$$-H_{2}C$$

$$H$$

$$-CH_{2}$$

and their contents satisfy the following:

$$20 \% \le 2,5-[diexo] \le 30 \%$$

$$20 \% \le 2,5-[exo,endo] \le 30 \%$$

$$20 \% \le 2,6 - [diexo] \le 30 \%$$

$$20 \% \le 2.6$$
-[exo,endo] $\le 30 \%$,

provided that

$$(2,5-[diexo]) + (2,5-[exo,endo]) + (2,6-[diexo]) +$$

$$(2,6-[exo,endo]) = 100 \%,$$

R represents a tetravalent group having from 4 to 27 carbon atoms, and selected from the group consisting of an aliphatic group, a monocyclic aliphatic group, a condensed polycyclic aliphatic group, a monocyclic aromatic group, a condensed polycyclic aromatic group, and a non-condensed polycyclic aliphatic or aromatic group which is composed of cycloaliphatic or aromatic groups mutually bonded to each other either directly or via a crosslinking member.

7. (Canceled)

8. (Original) A process for preparing a polyamic acid, which comprises reacting a mixture of diaminomethyl-bicyclo[2.2.1]heptanes, (2S,5S)-diaminomethyl-bicyclo[2.2.1]heptane of formula (3-1):

$$H_2N - H_2C \qquad H \qquad (3-1)$$

(2S,5R)-diaminomethyl-bicyclo[2.2.1]heptane of formula (3-2):

$$H \xrightarrow{i} CH_2 - NH_2$$

$$H_2N - CH_2$$

$$(3-2)$$

(2S,6R)-diaminomethyl-bicyclo[2.2.1]heptane of formula (3-3):

$$H_2N - H_2C$$
 $CH_2 - NH_2$ (3-3)

and (2S,6S)-diaminomethyl-bicyclo[2.2.1]heptane of formula (3-4):

$$H \longrightarrow CH_2 - NH_2$$

$$H_2N - CH_2$$

$$(3-4)$$

wherein,

10 % \leq (2S,5S)-diaminomethyl-bicyclo[2.2.1]heptane \leq 40 %,

10 % \leq (2S,5R)-diaminomethyl-bicyclo[2.2.1]heptane \leq 40 %,

10 % \leq (2S,6R)-diaminomethyl-bicyclo[2.2.1]heptane \leq 40 %,

 $10 \% \le (2S,6S)$ -diaminomethyl-bicyclo[2.2.1]heptane $\le 40 \%$, provided that,

(2S,5S) isomer + (2S,5R) isomer + (2S,6R) isomer + (2S,6S) isomer = 100 %, with a tetracarboxylic dianhydride represented by the formula (4):

$$\begin{array}{cccc}
O & O \\
\parallel & \parallel \\
C & C \\
O & C \\
\parallel & \parallel \\
O & O
\end{array}$$
(4)

wherein R represents a tetravalent group having from 4 to 27 carbon atoms and selected from the group consisting of an aliphatic group, a monocyclic aliphatic group, a condensed polycyclic aliphatic group, a monocyclic aromatic group, a condensed polycyclic aromatic group, and a non-condensed polycyclic aliphatic or aromatic group which is composed of cycloaliphatic or aromatic groups mutually bonded to each other either directly or via a crosslinking member.

9. (Original) A process for preparing a polyamic acid, which comprises reacting a mixture of diaminomethyl-bicyclo[2.2.1]heptanes, (2S,5S)-diaminomethyl-bicyclo[2.2.1]heptane of formula (3-1):

$$H_2N - H_2C$$

$$H$$

$$H$$

$$(3-1)$$

(2S,5R)-diaminomethyl-bicyclo[2.2.1]heptane of formula (3-2):

$$H \xrightarrow{\dot{i}} CH_2 - NH_2$$

$$H_2N - \dot{C}H_2$$

$$(3-2)$$

(2S,6R)-diaminomethyl-bicyclo[2.2.1]heptane of formula (3-3):

$$H_2N - H_2C$$

$$H_2 \longrightarrow CH_2 \longrightarrow NH_2$$

$$H_2 \longrightarrow H_2$$

$$(3-3)$$

and (2S,6S)-diaminomethyl-bicyclo[2.2.1]heptane of formula (3-4):

$$H \longrightarrow CH_2 - NH_2$$

$$H_2N - CH_2 \qquad (3-4)$$

wherein,

20 % \leq (2S,5S)-diaminomethyl-bicyclo[2.2.1]heptane \leq 30 %,

20 % \leq (2S,5R)-diaminomethyl-bicyclo[2.2.1]heptane \leq 30 %,

20 % \leq (2S,6R)-diaminomethyl-bicyclo[2.2.1]heptane \leq 30 %,

20 % \leq (2S,6S)-diaminomethyl-bicyclo[2.2.1]heptane \leq 30 %,

provided that,

(2S,5S) isomer + (2S,5R) isomer + (2S,6R) isomer + (2S,6S) isomer = 100 %, with a tetracarboxylic dianhydride represented by the formula (4):

$$\begin{array}{cccc}
O & O \\
\parallel & \parallel \\
C & C \\
O & C \\
\parallel & \parallel \\
O & O
\end{array}$$
(4)

wherein R represents a tetravalent group having from 4 to 27 carbon atoms and selected from the group consisting of an aliphatic group, a monocyclic aliphatic group, a condensed polycyclic aliphatic group, a monocyclic aromatic group, a condensed polycyclic aromatic group, and a non-condensed polycyclic aliphatic or aromatic group which is composed of cycloaliphatic or aromatic groups mutually bonded to each other either directly or via a crosslinking member.

10. (Canceled)

- 11. (Original) A process for preparing a polyimide, which comprises thermally or chemically imidizing the polyamic acid obtained in claim 8.
- 12. (Original) A process for preparing a polyimide, which comprises thermally or chemically imidizing the polyamic acid obtained in claim 9.
- 13. (Previously Presented) The polyamic acid of claim 3, of which the inherent viscosity measured in a solvent of N-methyl-2-pyrrolidone having the acid concentration of 0.5 g/dl at 35°C falls between 0.1 and 3.0 dl/g.

- 14. (Previously Presented) The polyimide of claim 6, of which the inherent viscosity measured in a mixed solvent of p-chlorophenyl/phenol = 9/1 (by weight) having the polyimide concentration of 0.5 g/dl at 35°C falls between 0.1 and 3.0 dl/g.
 - 15. (Original) A polyamic acid varnish containing the polyamic acid of claim 1.
 - 16. (Original) A polyamic acid varnish containing the polyamic acid of claim 2.
 - 17. (Original) A polyamic acid varnish containing the polyamic acid of claim 3.
 - 18. (Original) A polyimide film containing the polyimide of claim 4.
 - 19. (Original) An amorphous polyimide film containing the polyimide of claim 5.
- 20. (Original) An amorphous polyimide film of improved smoothness, containing the polyimide of claim 6.
- 21. (Previously Presented) The polyamic acid of claim 2, of which the inherent viscosity measured in a solvent of N-methyl-2-pyrrolidone having the acid concentration of 0.5 g/dl at 35°C falls between 0.1 and 3.0 dl/g.
 - 22. (Canceled)

- 23. (Previously Presented) The polyimide of claim 5, of which the inherent viscosity measured in a mixed solvent of p-chlorophenyl/phenol = 9/1 (by weight) having the polyimide concentration of 0.5 g/dl at 35°C falls between 0.1 and 3.0 dl/g.
 - 24. (Canceled)